REMARKS

Claims 1-18, and 20-27 are presented for prosecution. Claims 1, 4, 7, 8, 12, 23, and 24 are currently amended. Claim 19 is cancelled.

Claims 1-18 and 26-27 were rejected under 35 U.S.C. §103(a) as being unpatentable over Makino et al. (U.S. Pat. No. 4,825,405) in view of Teradaira et al. (U.S. Patent. No. 5,800,081) .

Concerning Claims 1, 21, 24, and 26-27, the Office Action asserts that Makino et al. discloses, among other elements, "a receive buffer (10) for temporarily storing received data;"...[and] ..."clearing means (34) for clearing the received buffer, characterized in that the clearing means is responsive to the state detecting means for clearing the received buffer in response to the printer entering said first state (Figs. 1-2, 4-7; col. 1, lines 42-56; col. 2, lines 6-64; col. 3, lines 30 - col. 4, lines 63)".

Claim 8 was rejected for the same reasons as Claim 1, above, and in reference to Claim 9, the Office Action asserts that Makino et al. teach that the clearing step is accomplished immediately after the first state is detected (Fig. 6; col. 4, lines 3-19);

Applicants respectfully disagree. There appears to be a misunderstanding regarding the teaching of Makino et al. Firstly, Makino et al. do not teach or suggest a printer that, when in an off-line mode, still receives and stores data from an external device into its receive buffer. Secondly, Makino et al. do not teach or suggest that their print buffer (or receive buffer) is cleared (or erased) upon entering their off-line mode. Either of these operations would render their printer inoperable for its intended purpose.

Basically, Makino et al. describes a printer that can print multiple copies of the contents of its buffer 10, as they were at the point when the printer is switched to an off-line mode, which Makino et al. define as a mode that effectively disconnects the printer from the external device (Col. 2, lines 23-27). That is, when in an on-line mode, the Makino et al.'s external device can send print data to the printer, but when in the off-line mode the external device is *disconnected*, and the printer cannot receive any additional data from the

external device. Otherwise, the contents of its buffer 10 would be corrupted, and Makino et al.'s printer would no longer be able to print exact copies of the most recently printed document (i.e. copies of the contents of buffer 10 at the point when the printer went off-line).

The presently claimed invention defines the "first mode" as being one in which the printer continues to receive data, but does not print the received data. That is, claim 1 recites, "a first state in which received data is not printed", and recites "a second state in which received data is printed". In both claimed modes of operation, the present printer continues to be connected to its host computer, and continues to receive data from the host computer. This limitation was already explicitly clear in claim 26, and was emphasized in dependent claims 4, 5, 7, 12, 13, and 14. Nonetheless, to remove any unintended ambiguity, claims 1, 8, 21, and 24 are currently amended to make it clear that the present printer is not disconnected from the host computer while in its first mode of operation (i.e. off-line). Dependent claims 4, 7, 12, and 23 are further amended to better define an operational state wherein only some type of data is disregarded while other data is not while in the first mode of operation.

The printer of the present invention cannot be disconnected form its host computer even while the printer in its first mode of operation because the printer of the present invention continues to respond to commands sent from the host computer even while the printer is offline. This is in direct conflict with the teachings of Makino et al., which clearly states that their printer is "disconnected" from its external device when placed in its first mode of operation (col. 2, lines 20-26). Therefore, Makino cannot receive any data and cannot store anything into its buffer 10 while it is off-line. Indeed, Makino et al. even state that when the printer is going to be disconnected form the external device, the printer informs the external device that it will be disconnected so that it won't even attempt to send data (Col. 3, lines 61-63).

The Office Action's misconception that Makino et al. show that their buffer 10 is cleared (or erased) upon entering their off-line mode, appears to be the result of a lack of clarity in Makino et al.'s technical description. The Office Action alludes to passage Col. 1, lines 43-46, which recites,

> "...a printer comprising means for clearing contents of a buffer memory in a non-print mode, which the printer is switched from an on-line mode to an off-line mode;"

Applicants respectfully put forth that this excerpt does not say that the buffer's contents are cleared upon the printer being switched form an on-line mode to an off-line. Indeed, such an operation would render Makino et al.'s printer incapable of executing its intended purpose of printing multiple copies of the contents of its buffer when in the off-line mode. Applicants put forth that the above excerpt instead explains that their printer can be switched from an on-line mode to an off-line mode, which is Makino et al. cite as being one of the first steps they require for their printer to produced multiple copies of their buffer's contents.

The Office Action further cites Makino et al.'s Fig. 6 as supposedly showing that Makino et al. erase their print data upon entering their off-line mode. However, Fig. 6 and Col. 4, lines 14-19 show the opposite. They show that Makino et al. clear their buffer only upon leaving the off-line mode to return to the on-line mode. That is, Makino et al. explain that their button 8 (Fig. 1) is their mode-select switch that is closed (i.e. ON) to choose on-line operation and opened (i.e. OFF) to choose off-line operation (col. 2, line 27-28). Unfortunately, Makino et al. use multiple terms for the same elements within their text and figures, which may explain the Office Action's misunderstanding. For example, not until Col. 5, lines 48-49 do Makino et al. explain that their mode select switch 8 is the same as the "line transfer switch" shown in the figures. Thus, Fig. 6 shows that not until the "line transfer switch" (i.e. mode select switch 8) is switched ON, which would cause the printer to return back on-line, will the print data in their buffer memory be erased.

Another example of a vague technical description leading to possible misunderstanding is col. 2, lines 28-33, which states:

> "The button of copy or print switch 11 is used to cause print head 3 to perform printing operation on basis of print data PD stored in a buffer memory 10 (Fig. 1) during the on-line mode, when concurrently mode select switch 8 is opened to change the on-line mode to the off-line mode."

The above excerpt would appear to imply that: (1) switch 11 has two uses, a print function and a copy function; or (2) actuating switch 11 prints the contents of buffer 10 when the printer is on-line; or (3) the contents of print buffer 10 are printed only when switch 11 and switch 8 are pressed concurrently; or (4) pressing switch 11 prints the contents of the print buffer only when switch 8 is switching the operational mode of their printer from the on-line mode to the off-line mode. However, from the rest Makino et al.'s text and figures, we know that none of the above interpretations are correct. Rather, when the printer is on-line, it will print the contents of its buffer 10, irrespective of the state of switch 11. Indeed, switch 11 is used only when the printer is off-line (as chosen by switch 8). As is shown in Fig. 6, when the printer goes off-line, it checks if copy switch 11 is ON, and if it is, it first determines if the printer is still off-line (i.e. if Line Transfer Switch 8 is not ON), before acting upon the signal from switch 11.

Although not perfectly clear, the function of Makino et al. appears to be as follows. Switch 11 may be switched ON before or after the printer goes off-line. Before switch 11 is switched, however, one should have already manually entered the number of copies desired via a keypad (13, Fig. 1). For example, a user may press switch 8 to place the printer off-line. At this point, the contents of buffer 10 hold the most recently executed print job, and the printer disconnects itself from the external device to prevent corruption of buffer 10. If the user decides that he/she would like to make copies of the most recent print job, the user enters the number of copies via keypad 13, and then presses switch 11. (Alternatively, switch 11 may be switched prior to pressing switch 8). When switch 11 is pressed, the printer will print at least one copy of the contents of buffer 11 (if no specific number is entered via keypad 13). However, if the user submits a number via keypad 13, then the printer will make multiple prints of the contents of buffer 10 up to the specified number. Makino et al. appear to refer to the situation where only one copy of buffer 10 is made as a "print" operation, and to the situation where multiple copies of buffer 10 are made as a "copy" operation, which may explain while Makino et al. alternatively refer to switch 11 as a print switch or a copy switch.

In operation, when Makino et al.'s printer goes off-line, it checks to see of any special function is being requested (switch 16), such as line feed (col. 2, lines 42-44, Fig. 6). If no special function is needed, it then repeatedly checks the condition of switch 11 to see if at any time while it is off-line, the user decides to print the contents of its buffer. If it detects that switch 11 is turned ON, it first determines if the printer is still off-line by checking switch 8, and if it is, then it begins to print out the contents of its buffer 10 up to the desired amount of copies.

From the above, it is clear that Makino et al. cannot erase the contents of their buffer 10 upon entering their off-line state. If they did, they would not be able to print the contents of their buffer, which is the intended purpose of their invention.

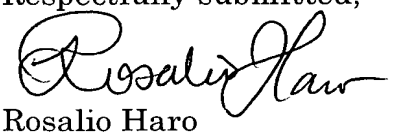
Thus, the present invention is directly opposite to Makino et al.'s teachings. That is, the present invention requires maintaining open communication between the printer and the external device even while the printer is off-line, but Makino et al. require that their printer be disconnected from its external device when the printer is off-line in order to protect the contents of their buffer 10. The present invention also requires that the contents of its receive buffer and/or print buffer be erased upon entering its off-line mode, but Makino et al. cannot erase their buffer 10 until their printer is switched back to on-line mode. Otherwise, the printer will lose its ability to provide copies (while it is off-line) of the most recent print job it received while it was previously on-line.

Furthermore, the Makino et al. reference cannot be combined with any reference that may permit a printer to continue receiving data while it is offline since such an operation would render Makino et al.'s printer inoperable for its intended purpose, i.e. such an operation would corrupt the contents of its buffer 10.

Also, none of the cited prior art teach or suggest a printer that selectively disregards some data and executes other data while it is off-line.

In view of the foregoing amendments and remarks, Applicants respectfully request favorable reconsideration of the present application.

Respectfully submitted,



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